

ABSTRACT

A system is provided for withdrawing permeate from a substrate. The exemplary system includes a vessel configured to contain substrate, two or more compartments
5 configured to receive substrate from the vessel and to return a portion of received substrate to the vessel, and a filter positioned at least partially within each of the compartments and configured to separate permeate from substrate during operation of the filter. At least one of the compartments is configured to contain cleaning solution
10 and substantially prevent cleaning solution from contacting substrate in the vessel during cleaning of the filter. The exemplary system is configured for cleaning the filter in situ in at least one of the compartments while operating the filter in at least one other of the compartments. A method for adapting a filtration system for cleaning thereof and a method for withdrawing permeate from a substrate using a filtration system are also provided.